Amendments to the Claims

Listing of the Claims

The listing of claims will replace all prior versions and listings of claims in the application:

1-124. (Cancelled)

125. (Previously Presented) A dermal patch comprising at least one power source comprising an electrochemical cell for powering the patch, wherein the electrochemical cell comprises a negative pole, a positive pole, and an electrolyte and at least two electrodes spaced apart and in electrical connection with the electrochemical cell, the electrodes for electrically coupling to a skin portion and/or skin appendage of a subject, wherein at least one of the at least two electrodes is integrally formed on or with the electrochemical cell.

126-130. (Cancelled)

131. (Previously Presented) The dermal patch of claim 125 further comprising at least one retainer for retaining a substance and for preventing contact between at least one of the at least two electrodes and the skin portion.

132. (Previously Presented) The dermal patch of claim 125 for introducing current and/or voltage to the skin portion of the subject.

133. (Previously Presented) The dermal patch of claim 125 for at least one of dermal delivery, transdermal delivery and intradermal delivery or a combination thereof of at least one substance to the skin portion of the subject.

134. (Previously Presented) The dermal patch of claim 125, wherein the patch is a thin and flexible patch.

135. (Previously Presented) The dermal patch of claim 125, wherein the at least two electrodes are integrally formed with the electrochemical cell.

136. (Previously Presented) The dermal patch of claim 125, wherein the patch further comprises a patch body and wherein the power source and the at least two electrodes are disposed on the patch body in spaced relation to each other to define a gap between the at least two electrodes.

137. (Previously Presented) The dermal patch of claim 125, wherein the patch further comprises an attachment mechanism for attaching the patch to the skin portion of the subject.

138. (Previously Presented) The dermal patch of claim 132, wherein the patch further comprises circuitry for controlling the current.

139. (Previously Presented) The dermal patch of claim 125, wherein the electrochemical cell comprises a flexible thin layer electrochemical cell.

140. (Previously Presented) The dermal patch of claim 139, wherein the flexible thin layer electrochemical cell is a flexible thin layer open liquid state electrochemical cell which comprises a first layer of insoluble negative pole, a second layer of insoluble positive pole and a third layer of aqueous electrolyte, the third layer being disposed between the first and second layers and including:

(a) a deliquescent material for keeping the open cell wet at all times;

(b) an electroactive soluble material for obtaining required ionic conductivity; and

(c) a water-soluble polymer for obtaining a required viscosity for adhering the first and the second layers to the third layer.

141. (Previously Presented) The dermal patch of claim 125, packaged and identified for an application selected from the group consisting of a wound healing application, a scar prevention application, a scar reduction application, a tissue repair application, a tissue regeneration

application, muscle stimulation, muscle contraction, accelerated bone healing, treatment of hyperhidrosis, inhibition of inflammation, facilitation and promotion of metabolic processes, pain alleviation, and treatment of rosacea, wrinkles, skin dryness, skin burns and telangiactasia.

142. (Previously Presented) The dermal patch of claim 125 further comprising a conductive fluid.

143. (Previously Presented) The dermal patch of claim 142, wherein the conductive fluid comprises at least one substance.

144. (Previously Presented) The dermal patch of claim 143 wherein the conductive fluid is preapplied to the at least two electrodes and wherein on contacting the patch with skin an electric current is delivered through the conductive fluid and skin of a subject so as to transdermally or intradermally deliver the at least one substance.

145. (Previously Presented) The dermal patch of claim 142, wherein the conductive fluid is an aqueous hydrogel.

146. (Previously Presented) The dermal patch of claim 133, wherein the at least one substance is selected from the group consisting of a pharmaceutical, a cosmetic, a cosmeceutical and moisture.

147. (Previously Presented) The dermal patch of claim 133 wherein the at least one substance is at least one of an analgesic, anesthetic, hormone, muscle relaxant, anti-wrinkling agent, moisturizer, anticellulite agent, skin bleaching agent, antibiotic, antiinfective, antiviral agent or salicylic acid.

148. (Previously Presented) The dermal patch of claim 133, wherein the at least one substance is at least one of antiinfectives, antibiotics, antiviral agents, analgesics, fentanyl, sufentanil, buprenorphine, analgesic combinations, anesthetics, anorexics, antiarthritics, antiasthmatic

agents, terbutaline, anticonvulsants, antidepressants, antidiabetic agents, antidiarrheals, antihistamines, antiinflammatory agents, antimigraine preparations, antimotion sickness, scopolamine, ondansetron, antinauseants, antineoplastics, antiparkinsonism drugs, cardiostimulants, dobutamine, antipruritics, antipsychotics, antipyretics, antispasmodics, gastrointestinal and urinary, anticholinergics, sympathornimetics, xanthine derivatives, cardiovascular preparations, calcium channel blockers, nifedipine, beta-blockers, beta-agonists, salbutamol, ritodrine, antiarrythmics, antihypertensives, atenolol, ACE inhibitors, diuretics, vasodilators, coronary, peripheral and cerebral, central nervous system stimulants, cough and cold preparations, decongestants, diagnostics, hormones, parathyroid hormone, growth hormone, insulin, hypnotics, immunosuppressives, muscle relaxants, parasympatholytics, parasympathomimetics, anti-oxidants, nicotine, prostaglandins, psychostimulants, sedatives, tranquilizers, skin acting anti-oxidants, caretenoids, ascorbic acid (vitamin C), vitamin E, anti wrinkling agents, retinoids, retinol (vitamin A alcohol), alpha-hydroxic acids, beta-hydroxy acid, salicylic acid, combination-hydroxy acids and poly-hydroxy acids, and hydrolyzed and soluble collagen, moisturizers, hyaluronic acid, anticellulite agents, aminophyllines, skin bleaching agents, retinoic acid, hydroquinone, peroxides, botanical preparations, extracts of aloe-vera, wild yam, hamamelitanin, ginseng, witch hazel, water and green tea.

149. (Previously Presented) The dermal patch of claim 136, wherein the at least two electrodes are applied to the patch body using a printing technique.

150. (Previously Presented) The dermal patch of claim 125 for recovery of substances from the body.

151. (Previously Presented) The dermal patch of claim 125, wherein at least one of the at least two electrodes is a terminal of the electrochemical cell.

152. (Previously Presented) The dermal patch of claim 125, wherein the at least two electrodes are both terminals of the electrochemical cell.

153. (Previously Presented) The dermal patch of claim 125, wherein the patch is foldable.

154. (Previously Presented) The dermal patch of claim 125, wherein the power source and the at least two electrodes are the only constituents of the patch.

155. (Previously Presented) The dermal patch of claim 136, wherein the dermal patch is an integrated patch comprising the electrochemical cell and the at least two electrodes applied onto the patch using a printing technology.

156. (Previously Presented) A kit for introduction of an electric current and/or voltage to a skin portion and/or transdermal or intradermal delivery of at least one substance comprising:

(a) a dermal patch of claim 125; and

(b) at least one retainer for retaining a conductive fluid.

157. (Previously Presented) The kit of claim 156 , wherein the conductive fluid contains the at least one substance and wherein the retainer is a separator for deposition upon the skin portion such that, upon contact by the separator with at least one of the at least two electrodes, the electric current causes the transdermal or intradermal delivery of the at least one substance.

158. (Previously Presented) The kit of claim 156 , wherein the conductive fluid contains the at least one substance and wherein the retainer is a separator for deposition on at least one of the at least two electrodes such that, upon contact by the separator with the skin portion, the electric current causes the transdermal or intradermal delivery of the at least one substance.

159. (Previously Presented) The kit of claim 156 , wherein the retainer is a separator and the separator is contained in a removable cover.

160. (Previously Presented) A method of use of a dermal patch of claim 125, the method comprising:

(a) positioning the dermal patch such that the electrodes are conductively coupled to the skin portion of the subject; and

(b) delivering an electric current to the skin portion of the subject.

161. (Previously Presented) The method of claim 160 , further comprising promoting delivery of at least one substance to the skin portion.

162-165. (Cancelled)

166. (Previously Presented) The dermal patch of claim 145, wherein the aqueous hydrogel is applied during manufacture of the patch.

167. (Previously Presented) The method of claim 160, wherein there is no separate step of the user applying hydrogel to the skin or electrode.